					PARTMENT OF NA	OF UTAH ATURAL RESOURCES GAS AND MINING			AMENDE	FOR ED REPOR			
		A	PPLICATION FOR	PERMIT T	O DRILL		1	1. WELL NAME and NUMBER Hardinger 3-3-4-2WH					
2. TYPE OI	F WORK	DRILL NEW WELL	. (iiii) REENTER P&	A WELL	DEEPEN WELL ()	3	3. FIELD OR WILDCAT WILDCAT					
4. TYPE OF	WELL			ed Methane				5. UNIT or COMMUNITI	IZATION A	AGREEME	NT NAM	E	
6. NAME O	F OPERATOR		NEWFIELD PRODUC	7	7. OPERATOR PHONE	435 646-	-4825						
8. ADDRES	S OF OPERAT	OR	9	O. OPERATOR E-MAIL		wfield.com	1						
	AL LEASE NUM , INDIAN, OR S		Rt 3 Box 3630 , M	11. MINER	AL OWNERSHIP	· · · · · · · · · · · · · · · · · · ·		2. SURFACE OWNERS	HIP		_	-@	
		patented OWNER (if box 12	= 'fee')	FEDERA	L INDIAN (STATE FEE	~	FEDERAL INDI		STATE (E (<u>)</u>	
		CE OWNER (if box	H. Bert Jenson ar	id Diana Jen	son				435-646	-3384			
		•	RR 3 Box 3621, M			PRODUCTION FROM		9. SLANT	(00 /		
	I ALLOTTEE O = 'INDIAN')	R TRIBE NAME			FORMATIONS	gling Application) NO	_		ECTIONAL	но	ORIZONT	AL 📵	
20. LOCA	TION OF WELL	-	FC	OTAGES	Q	TR-QTR	ON	TOWNSHIP	RAN	NGE	МЕ	RIDIAN	
LOCATIO	N AT SURFACE	E	661 FN	L 2149 FW	'L	NENW		4.0 S	2.0	W		U	
Top of U	permost Proc	lucing Zone	661 FN	L 2149 FW	'L	NEMA 3		4.0 S	2.0	W		U	
At Total	Depth		660 FS	L 1980 FW	'L	3		4.0 S	2.0	W		U	
21. COUN	TY	DUCHESNE		22. DISTAI	NCE TO NEAREST L	EAS LINE (Feet)	2	23. NUMBER OF ACRES	S IN DRIL 40	LING UNIT	Г		
					NCE TO NEAREST V	VELL IN SAME POOL pleted) 0	2	26. PROPOSED DEPTH MD:		TVD: 774	9		
27. ELEVA	TION - GROUN			28. BOND				29. SOURCE OF DRILL	OVAL NUM	IBER IF AF	PLICABL	.E	
		5268		Шо		01834 Cement Information			43747	78			
String	Hole Size	Casing Size	Length	Weight	Grade & Thre			Cement		Sacks	Yield	Weight	
COND	17.5	14	0- 60	37.0				Class G		35	1.17	15.8	
SURF	12.25	0.005	0 - 2500	36.0	LEE CTOC								
									204	3.53	11.0		
								Class G		154	1.17	15.8	
I1	8.75	7	0 - 8151	26.0	P-110 LT&			Class G mium Lite High Stre		154 215	1.17 3.53	15.8 11.0	
PROD	8.75 6.125			26.0		C 11.5		Class G		154	1.17	15.8	
		7	0 - 8151		P-110 LT&	C 11.5		Class G mium Lite High Stre 50/50 Poz		154 215 386	1.17 3.53 1.24	15.8 11.0 14.3	
	6.125	7	0 - 8151 7269 - 11681	13.5	P-110 LT&	C 11.5	Pre	Class G mium Lite High Stre 50/50 Poz No Used	ength	154 215 386 0	1.17 3.53 1.24	15.8 11.0 14.3	
PROD	6.125 VER	7 4.5 RIFY THE FOLLO	0 - 8151 7269 - 11681	13.5	P-110 LT& P-110 Othe ATTACI CCORDANCE W	C 11.5 er 11.5	Pre	Class G mium Lite High Stre 50/50 Poz No Used	ength	154 215 386 0	1.17 3.53 1.24	15.8 11.0 14.3	
PROD	6.125 VEF	7 4.5 RIFY THE FOLLO	0 - 8151 7269 - 11681 DWING ARE ATTAC	13.5 CHED IN A	P-110 LT& P-110 Othe ATTACI CCORDANCE WI	C 11.5 er 11.5 HMENTS ITH THE UTAH OIL AN	Pre D GAS (Class G mium Lite High Stre 50/50 Poz No Used	ength	154 215 386 0	1.17 3.53 1.24	15.8 11.0 14.3	
PROD	6.125 VEF ELL PLAT OR M	7 4.5 RIFY THE FOLLO IAP PREPARED BY ATUS OF SURFACE	0 - 8151 7269 - 11681 DWING ARE ATTAC	13.5 CHED IN A	P-110 LT& P-110 Othe ATTACI CCORDANCE WI NEER URFACE)	C 11.5 er 11.5 HMENTS ITH THE UTAH OIL AN	Pre D GAS (Class G mium Lite High Stre 50/50 Poz No Used CONSERVATION GE	ength	154 215 386 0	1.17 3.53 1.24	15.8 11.0 14.3	
PROD WE AFI	6.125 VEF ELL PLAT OR M	7 4.5 RIFY THE FOLLO IAP PREPARED BY ATUS OF SURFACE	0 - 8151 7269 - 11681 DWING ARE ATTAC	13.5 CHED IN A R OR ENGIN	P-110 LT& P-110 Othe ATTACI CCORDANCE WI NEER URFACE)	C 11.5 HMENTS TH THE UTAH OIL AND COMPLETE DRIL FORM 5. IF OPER TOPOGRAPHICAL	Pre D GAS (Class G mium Lite High Stre 50/50 Poz No Used CONSERVATION GE	ENERAL ASE OWN	154 215 386 0	1.17 3.53 1.24	15.8 11.0 14.3	
PROD WE AFI	VERELL PLAT OR METABORIT OF STA	7 4.5 RIFY THE FOLLO IAP PREPARED BY ATUS OF SURFACE	0 - 8151 7269 - 11681 DWING ARE ATTAC	13.5 CHED IN A R OR ENGIN	P-110 LT& P-110 Othe ATTACI CCORDANCE WI NEER URFACE) LY DRILLED)	C 11.5 HMENTS TH THE UTAH OIL AND COMPLETE DRIL FORM 5. IF OPER TOPOGRAPHICAL	Pre D GAS (Class G mium Lite High Stre 50/50 Poz No Used CONSERVATION GE AN OTHER THAN THE LEA	ENERAL ASE OWN	154 215 386 0	1.17 3.53 1.24	15.8 11.0 14.3	
PROD WE AFI NAME DO SIGNATUI API NUME	VERELL PLAT OR METABORIT OF STA	7 4.5 RIFY THE FOLLO IAP PREPARED BY ATUS OF SURFACE RVEY PLAN (IF DII	0 - 8151 7269 - 11681 DWING ARE ATTAC	13.5 CHED IN A R OR ENGIN IT (IF FEE SI DRIZONTAL	P-110 LT& P-110 Othe ATTACI CCORDANCE WI NEER URFACE) LY DRILLED) TLE Permitting Age	C 11.5 HMENTS TH THE UTAH OIL AND COMPLETE DRIL FORM 5. IF OPER TOPOGRAPHICAL	Pre D GAS (Class G mium Lite High Stre 50/50 Poz No Used CONSERVATION GE AN OTHER THAN THE LEA	ENERAL ASE OWN	154 215 386 0	1.17 3.53 1.24	15.8 11.0 14.3	

Newfield Production Company Hardinger 3-3-4-2WH

Surface Hole Location: 661' FNL, 2149' FWL, Section 3, T4S, R2W Bottom Hole Location: 660' FSL, 1980' FWL, Section 3, T4S, R2W

Duchesne County, UT

Drilling Program

1. Formation Tops

Uinta surface
Green River 2,872'
Garden Gulch member 5,385'
Wasatch 7,920'
Pilot Hole TD 8,170'

Lateral TD 7,749' TVD / 11,681' MD

2. Depth to Oil, Gas, Water, or Minerals

Base of moderately saline 336' (wate Green River 5,385' - 7,749 (oil)

Note: The pilot hole will be drilled into the Washich formation for evaluation and targeting purposes only. The lateral will be drilled in the Green River formation.

3. Pressure Control

Section BOR Description

Surface | 1/4' diverter

Interm/Prod The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc for a 5M system.

A 5M BOP system will consist of 2 ram preventers (double or two singles) and an annular preventer (see attached diagram). A choke manifold rated to at least 5,000 psi will be used.

4. Casing

Description	Interval		Weight	Grade	Coup	Pore	MW @	Frac	Safety Factors				
	Тор	Bottom (TVD/MD)	(ppf)	Grauc	Coup	Press @ Shoe	Shoe	Grad @ Shoe	Burst	Collapse	Tension		
Conductor	0'	60'	37	H-40	Weld								
14	U	00	37	H-40	weid								
Surface	0'	0'	0'	2.500	36	J-55	STC	8.33	8.33	14	3,520	2,020	394,000
9 5/8	U	2,500'	30	1-33	310	8.33	6.33	14	2.12	2.54	4.38		
Intermediate	01	7,840'	26	D 110	DTC	11	11.5	1.5	9,960	6,210	853,000		
7	0'	8,151'	26	P-110	BTC	11	11.5	15	2.69	1.59	4.02		
Production	7.260	7,749'	12.5	13.5 P-110	DTC	11	11.5		12,410	10,670	422,000		
4 1/2	7,269'	11,681'	13.5		BTC	11	11.5		3.39	2.76	7.09		

RECEIVED: April 23, 2012

Assumptions:

Surface casing MASP = (frac gradient + 1.0 ppg) - (gas gradient)

Intermediate casing MASP = (reservoir pressure) - (gas gradient)

Production casing MASP = (reservoir pressure) - (gas gradient)

All collapse calculations assume fully evacuated casing with a gas gradient

All tension calculations assume air weight of casing

Gas gradient = 0.1 psi/ft

All casing shall be new.

All casing strings shall have a minimum of 1 centralizer on each of the bottom 3 joints.

5. Cement

Job	Hole Size	Fill	Slurry Description	ft ³	OH excess	Weight (ppg)	Yield (ft³/sk)
Conductor	17 1/2	60'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	35	15%	15.8	1.17
Surface Lead	12 1/4	2,000'	Premium Lite II w/ 3% KCl + 10% bentonite	204	15%	11.0	3.53
Surface Tail	12 1/4	500'	Class G w/ 2% KCl + 0.25 vo/st Collo Flake	180 154	15%	15.8	1.17
Pilot Hole Plug Back	8 3/4	621'	50/50 Poz/Class G w/3% KCl + 2% bentonte	298 241	15%	14.3	1.24
Intermediate Lead	8 3/4	4,385	Premium hite II w/ 3% KCl + 10%	758 215	15%	11.0	3.53
Intermediate Tail	8 3/4	2,766	50/50 Poz/Class G w/ 3% KCl + 2% bentonite	478 386	15%	14.3	1.24
Production	6 1/8	-	Liner will not be cemented. It will be isolated with a liner top packer.		-	1	1

The surface casing will be cemented to surface. In the event that cement does not reach surface during the primary cement job, a remedial job will be performed.

Actual cement volumes for the pilot hole plug back and the intermediate casing string will be calculated from an open hole caliper log, plus 15% excess.

The production liner will be left uncemented. Individual frac stages will be isolated with open hole packers. A liner top hanger and packer will be installed 50' above KOP.

6. Type and Characteristics of Proposed Circulating Medium

<u>Interval</u> <u>Description</u>

Surface - 2,500'

An air and/or fresh water system will be utilized. If an air rig is used, the blooie line discharge may be less than 100' from the wellbore in order to minimize location size. The blooie line is not equipped with an automatic igniter. The air compressor may be located less than 100' from the well bore due to the low possibility of combustion with the air/dust mixture. Water will be on location to be used as kill fluid, if necessary.

2,500' - TD A water based mud system will be utilized. Hole stability may be improved

with additions of KCl or a similar inhibitive substance. In order to control formation pressure the system will be weighted with additions of bentonite, and

if conditions warrant, with barite.

Anticipated maximum mud weight is 11.5 ppg.

7. Logging, Coring, and Testing

Logging: A dual induction, gamma ray, and caliper log will be run from TD to the base of the

surface casing. A compensated neutron/formation density log will be run from TD to the top of the Garden Gulch formation. A cement bond log will be run from PBTD to the

cement top behind the production casing.

Cores: As deemed necessary.

DST: There are no DST's planned for this well.

8. Anticipated Abnormal Pressure or Temperature

Maximum anticipated bottomhole pressure will be approximately equal to total depth (feet) multiplied by a 0.57 psi/ft gradient.

$$7,749' \times 0.57 \text{ psi/ft} = 432 \text{ psi}$$

No abnormal temperature is expected. No 1.8 is expected

9. Other Aspects

An 8-3/4" pilot hole will be drilled in order to determine the depth to the lateral target zone.

The pilot hole whose logged, and then plugged back in prepartion for horizontal operations.

Directional tools will then be used to build to 91.52 degrees inclination.

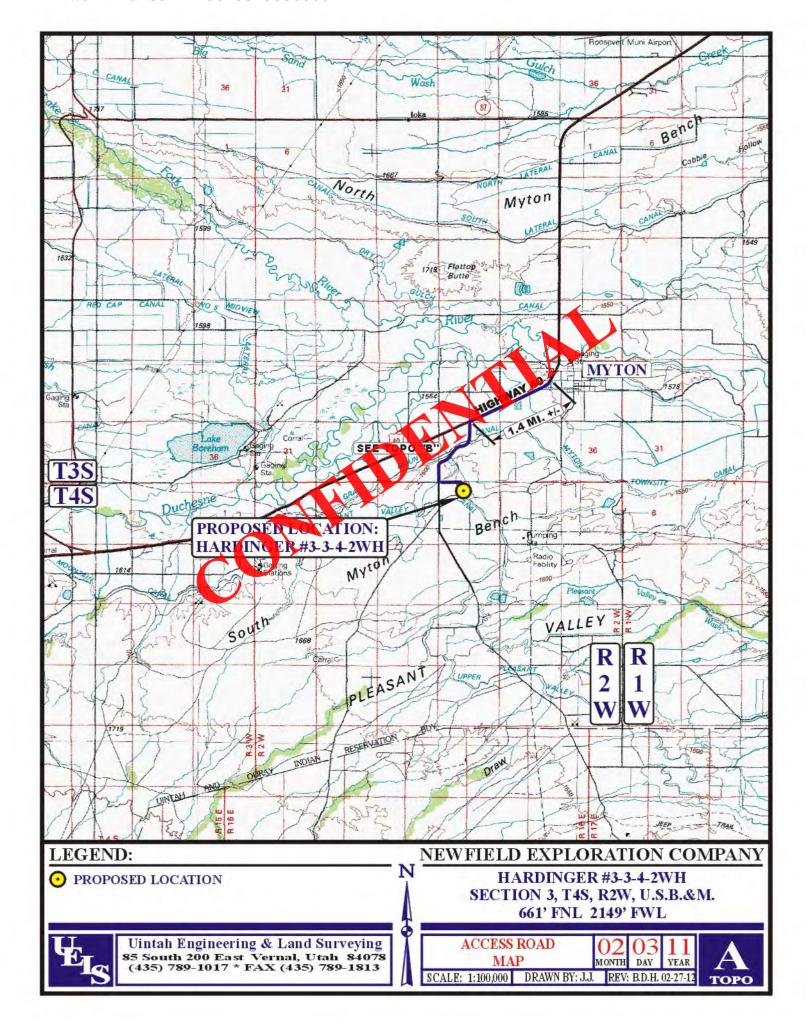
The 7" intermediate casing string will be set once the well is landed horizontally in the target zone.

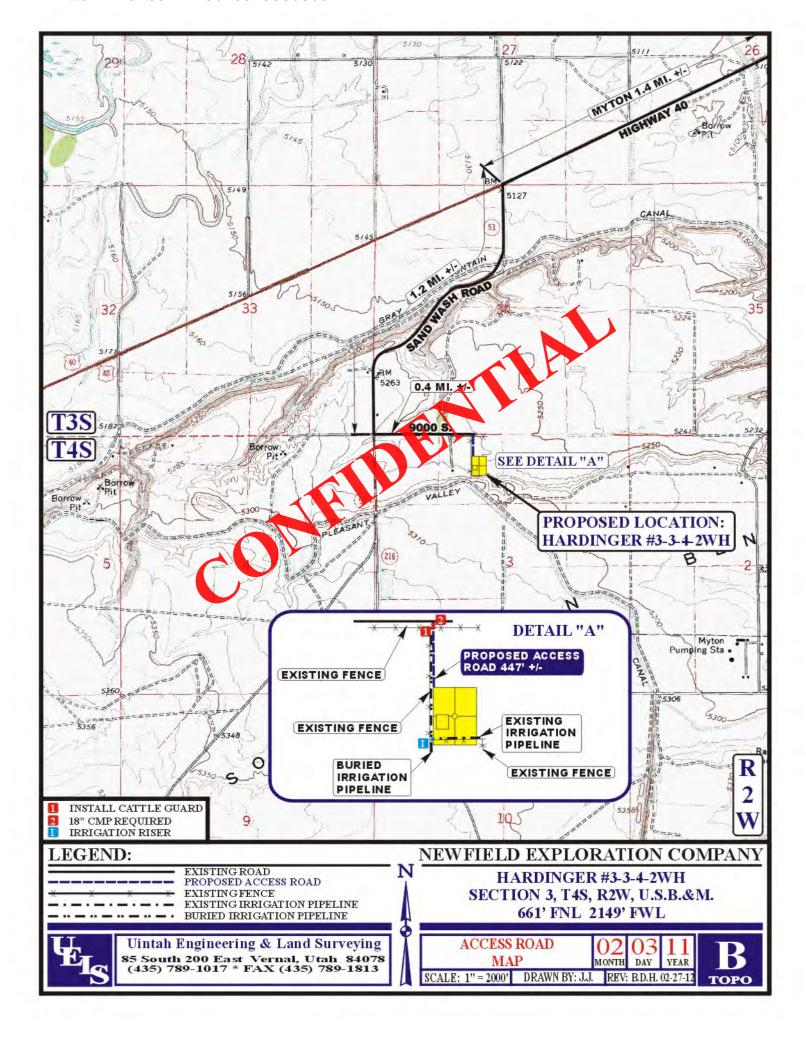
The lateral will be drilled to the bottomhole location shown on the plat.

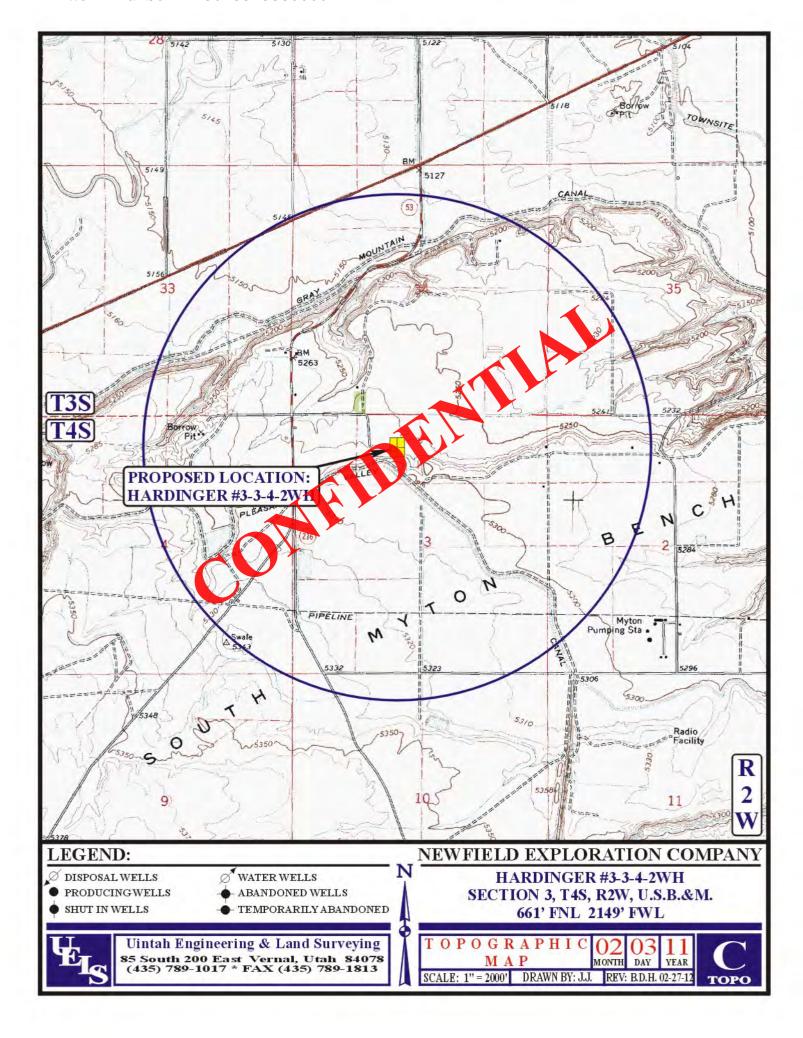
A liner with a system of open hole packers will be used to provide multi-stage frac isolation in the lateral. The top of the liner will be place 50' above KOP and will be isolated with a liner top packer.

Newfield requests the following variances from Onshore Order #2:

 Variance from Onshoer Order #2, III.E.1
 Refer to Newfield Production Company Standard Operating Practices "Ute Tribal Green River Development Program" paragraph 9.0









NEWFIELD EXPLORATION CO.

DUCHESNE COUNTY, UT

HARDINGER 3-3-4-2WH

Plan: Design #1

Standard Survey Report

19 APRIL, 012

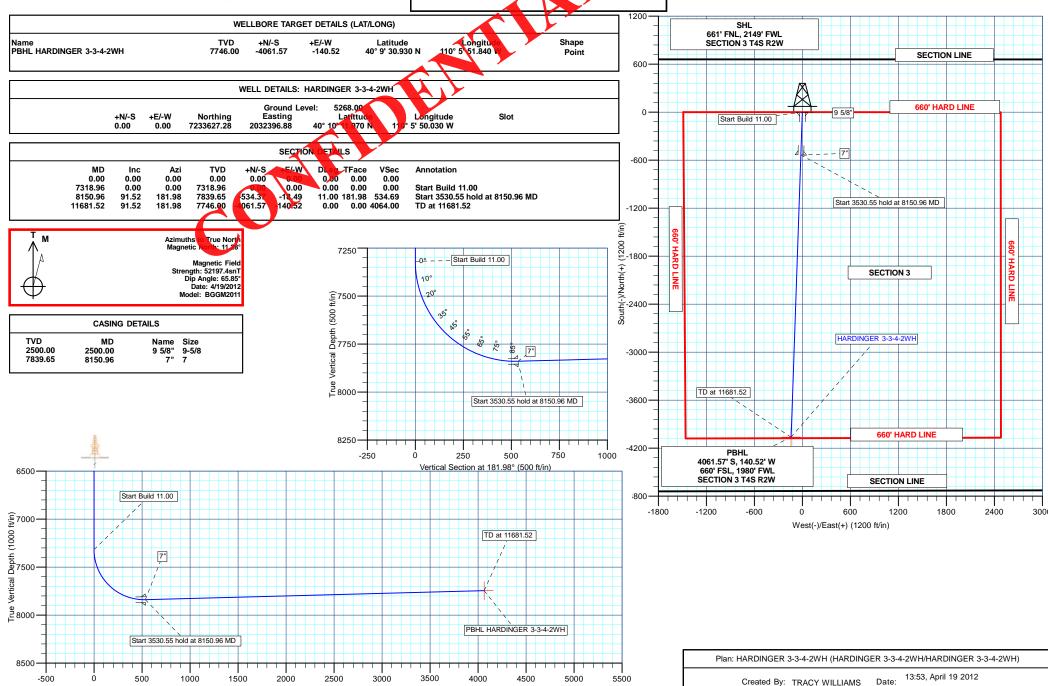


API Well Number: 43013513880000

NEWFIELD

Project: DUCHESNE COUNTY, UT Site: HARDINGER 3-3-4-2WH Well: HARDINGER 3-3-4-2WH Wellbore: HARDINGER 3-3-4-2WH Design: HARDINGER 3-3-4-2WH Latitude: 40° 10' 11.070 N Longitude: 110° 5' 50.030 W

GL: 5268.00 KB: WELL @ 5286.00ft (Original Well Elev) **Weatherford**°



Vertical Section at 181.98° (1000 ft/in)



NEWFIELD EXPLORATION CO.

DUCHESNE COUNTY, UT HARDINGER 3-3-4-2WH HARDINGER 3-3-4-2WH

HARDINGER 3-3-4-2WH

Plan: HARDINGER 3-3-4-2WH

Standard Planning Report

19 April, 2012





Weatherford International Ltd.

Planning Report



EDM 2003.21 Single User Db Database: Company: NEWFIELD EXPLORATION CO. Project: DUCHESNE COUNTY, UT HARDINGER 3-3-4-2WH Site: Well: HARDINGER 3-3-4-2WH Wellbore: HARDINGER 3-3-4-2WH Design: HARDINGER 3-3-4-2WH

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: **Survey Calculation Method:**

Well HARDINGER 3-3-4-2WH WELL @ 5286.00ft (Original Well Elev) WELL @ 5286.00ft (Original Well Elev) Minimum Curvature

Project DUCHESNE COUNTY, UT

Map System: US State Plane 1983 North American Datum 1983 Geo Datum:

Map Zone: Utah Central Zone System Datum: Mean Sea Level

HARDINGER 3-3-4-2WH Site

Northing: 7,233,627.28ft Site Position: Latitude: 40° 10' 11.070 N From: Lat/Long Easting: 2,032,396.88ft Longitude: 110° 5' 50.030 W 0.90° **Position Uncertainty:** 0.00 ft Slot Radius: **Grid Convergence**

Well HARDINGER 3-3-4-2WH 7,233,627.18 **Well Position** +N/-S 0.00 ft Northing: titude: 40° 10' 11.070 N 2,032,396.88 ft +E/-W 0.00 ft Easting: Longitude: 110° 5' 50.030 W **Position Uncertainty** 0.00 ft Wellhead Elevation: Ground Level: 5,268.00 ft

HARDINGER 3-3-4-2WH Wellbore

Field Strength **Magnetics Model Name** Sample Date lination **Dip Angle** (°) (°) (nT) BGGM2011 11.28 65.85 52,197

HARDINGER 3-3-4-2W Design

Audit Notes:

Version: Phase: **PLAN** Tie On Depth: 0.00

epth From (TVD) +N/-S Vertical Section: +E/-W **Direction** (ft) (ft) (ft) (°) 0.00 0.00 0.00 181.98

Plan Section	s									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7,318.96	0.00	0.00	7,318.96	0.00	0.00	0.00	0.00	0.00	0.00	
8,150.96	91.52	181.98	7,839.65	-534.37	-18.49	11.00	11.00	0.00	181.98	
11,681.52	91.52	181.98	7,746.00	-4,061.57	-140.52	0.00	0.00	0.00	0.00 P	BHL HARDINGEF

RECEIVED: April 23, 2012



Weatherford International Ltd.

Planning Report



Database: Company: Project: Site: Well: Wellbore: EDM 2003.21 Single User Db NEWFIELD EXPLORATION CO. DUCHESNE COUNTY, UT HARDINGER 3-3-4-2WH

HARDINGER 3-3-4-2WH HARDINGER 3-3-4-2WH HARDINGER 3-3-4-2WH Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well HARDINGER 3-3-4-2WH WELL @ 5286.00ft (Original Well Elev) WELL @ 5286.00ft (Original Well Elev) True

Minimum Curvature

Design:	HARDINGER	R 3-3-4-2WH							
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00 100.00 200.00 300.00 400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 100.00 200.00 300.00 400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
500.00 600.00 700.00 800.00 900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	500.00 600.00 700.00 800.00 900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
1,000.00 1,100.00 1,200.00 1,300.00 1,400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	1,000.00 1,100.00 1,200.00 1,300.00 1,400.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
1,500.00 1,600.00 1,700.00 1,800.00 1,900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	1,500.00 1,600.00 1,700.00 1,800.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
2,000.00 2,100.00 2,200.00 2,300.00 2,400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	2,000.00 2,100.00 2,200.00 2,300.00 2,400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
9 5/8"									
2,500.00 2,600.00 2,700.00 2,800.00 2,900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	2,500.00 2,600.00 2,700.00 2,800.00 2,900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
3,000.00 3,100.00 3,200.00 3,300.00 3,400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	3,000.00 3,100.00 3,200.00 3,300.00 3,400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
3,500.00 3,600.00 3,700.00 3,800.00 3,900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	3,500.00 3,600.00 3,700.00 3,800.00 3,900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
4,000.00 4,100.00 4,200.00 4,300.00 4,400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	4,000.00 4,100.00 4,200.00 4,300.00 4,400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
4,500.00 4,600.00 4,700.00 4,800.00 4,900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	4,500.00 4,600.00 4,700.00 4,800.00 4,900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
5,000.00 5,100.00 5,200.00	0.00 0.00 0.00	0.00 0.00 0.00	5,000.00 5,100.00 5,200.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00



Weatherford International Ltd.

Planning Report



Database: Company: Project: Site: Well:

Wellbore:

EDM 2003.21 Single User Db NEWFIELD EXPLORATION CO. DUCHESNE COUNTY, UT HARDINGER 3-3-4-2WH HARDINGER 3-3-4-2WH

HARDINGER 3-3-4-2WH HARDINGER 3-3-4-2WH Local Co-ordinate Reference: TVD Reference:

MD Reference: North Reference: Survey Calculation Method: Well HARDINGER 3-3-4-2WH WELL @ 5286.00ft (Original Well Elev) WELL @ 5286.00ft (Original Well Elev)

Minimum Curvature

Design:	HARDINGE	R 3-3-4-2WH							
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.00 5,400.00	0.00 0.00	0.00 0.00	5,300.00 5,400.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
5,500.00 5,600.00 5,700.00 5,800.00 5,900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	5,500.00 5,600.00 5,700.00 5,800.00 5,900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
6,000.00 6,100.00 6,200.00 6,300.00 6,400.00	6,100.00 0.00 6,200.00 0.00 6,300.00 0.00 6,400.00 0.00		6,000.00 6,100.00 6,200.00 6,300.00 6,400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.06 0.00 0.00	9.00 0.00 9.00 9.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
6,500.00 6,600.00 6,700.00 6,800.00 6,900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	6,500.00 6,600.00 6,700.00 6,800.00 6,900.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
7,000.00 7,100.00 7,200.00 7,300.00	7,000.00 0.00 0.00 7,000.00 7,100.00 0.00 0.00 7,100.00 7,200.00 0.00 0.00 7,200.00 7,300.00 0.00 0.00 7,300.90		0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	
Start Build 7,318.96	0.00	00	7,318.96	0.00	0.00	0.00	0.00	0.00	0.00
7,350.00 7,400.00 7,450.00 7,500.00 7,550.00	3.41 8.91 14.41 19.91 25.41	181.98 181.98 181.98 181.98 181.98	7,349.98 7,399.67 7,448.62 7,496.38 7,542.50	-0.92 -6.29 -16.39 -31.13 -50.37	-0.03 -0.22 -0.57 -1.08 -1.74	0.92 6.29 16.40 31.15 50.40	11.00 11.00 11.00 11.00 11.00	11.00 11.00 11.00 11.00 11.00	0.00 0.00 0.00 0.00 0.00
7,600.00 7,650.00 7,700.00 7,750.00 7,800.00	30.91 36.41 41.91 47.41 52.91	181.98 181.98 181.98 181.98 181.98	7,586.56 7,628.16 7,666.91 7,702.46 7,734.48	-73.95 -101.64 -133.19 -168.30 -206.66	-2.56 -3.52 -4.61 -5.82 -7.15	74.00 101.70 133.27 168.40 206.78	11.00 11.00 11.00 11.00 11.00	11.00 11.00 11.00 11.00 11.00	0.00 0.00 0.00 0.00 0.00
7,850.00 7,900.00 7,950.00 8,000.00 8,050.00	58.41 63.91 69.41 74.91 80.41	181.98 181.98 181.98 181.98 181.98	7,762.67 7,786.78 7,806.57 7,821.88 7,832.56	-247.90 -291.66 -337.52 -385.07 -433.87	-8.58 -10.09 -11.68 -13.32 -15.01	248.05 291.83 337.73 385.30 434.13	11.00 11.00 11.00 11.00 11.00	11.00 11.00 11.00 11.00 11.00	0.00 0.00 0.00 0.00 0.00
8,100.00	85.91	181.98	7,838.51	-483.47	-16.73	483.76	11.00	11.00	0.00
8,150.96 8,200.00 8,300.00 8,400.00	55 hold at 815 91.52 91.52 91.52 91.52	181.98 181.98 181.98 181.98	7,839.65 7,838.35 7,835.70 7,833.05	-534.36 -583.36 -683.26 -783.17	-18.49 -20.18 -23.64 -27.10	534.68 583.71 683.67 783.64	11.00 0.00 0.00 0.00	11.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
8,500.00 8,600.00 8,700.00 8,800.00 8,900.00	91.52 91.52 91.52 91.52 91.52	181.98 181.98 181.98 181.98 181.98	7,830.39 7,827.74 7,825.09 7,822.43 7,819.78	-883.07 -982.98 -1,082.88 -1,182.79 -1,282.69	-30.55 -34.01 -37.47 -40.92 -44.38	883.60 983.57 1,083.53 1,183.50 1,283.46	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
9,000.00 9,100.00 9,200.00 9,300.00 9,400.00	91.52 91.52 91.52 91.52 91.52	181.98 181.98 181.98 181.98 181.98	7,817.13 7,814.48 7,811.82 7,809.17 7,806.52	-1,382.60 -1,482.50 -1,582.41 -1,682.31 -1,782.22	-47.83 -51.29 -54.75 -58.20 -61.66	1,383.43 1,483.39 1,583.35 1,683.32 1,783.28	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00



Weatherford International Ltd.

Planning Report



Database: Company: EDM 2003.21 Single User Db NEWFIELD EXPLORATION CO.

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: **Survey Calculation Method:**

Well HARDINGER 3-3-4-2WH WELL @ 5286.00ft (Original Well Elev) WELL @ 5286.00ft (Original Well Elev)

Minimum Curvature

Project: DUCHESNE COUNTY, UT HARDINGER 3-3-4-2WH Site: Well: HARDINGER 3-3-4-2WH HARDINGER 3-3-4-2WH Wellbore: Design: HARDINGER 3-3-4-2WH

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,500.00 9,600.00 9,700.00 9,800.00 9,900.00	91.52 91.52 91.52 91.52 91.52	181.98 181.98 181.98 181.98 181.98	7,803.87 7,801.21 7,798.56 7,795.91 7,793.26	-1,882.12 -1,982.03 -2,081.93 -2,181.84 -2,281.74	-65.12 -68.57 -72.03 -75.49 -78.94	1,883.25 1,983.21 2,083.18 2,183.14 2,283.11	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
10,000.00 10,100.00 10,200.00 10,300.00 10,400.00	91.52 91.52 91.52 91.52 91.52	181.98 181.98 181.98 181.98 181.98	7,790.60 7,787.95 7,785.30 7,782.65 7,779.99	-2,381.65 -2,481.55 -2,581.46 -2,681.36 -2,781.27	-82.40 -85.86 -89.31 -92.77 -96.25	2,383.07 2,483.04 2,583.00 2,682.97 2,782.93	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
10,500.00 10,600.00 10,700.00 10,800.00 10,900.00	91.52 91.52 91.52 91.52 91.52	181.98 181.98 181.98 181.98 181.98	7,777.34 7,774.69 7,772.04 7,769.38 7,766.73	-2,881.17 -2,981.08 -3,080.98 -3,180.69 -3,280.79	-32.68 -103.14 -106.60 -111.05 113.51	2,882.90 2,982.86 3,082.83 3,182.79 3,282.76	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
11,000.00 11,100.00 11,200.00 11,300.00 11,400.00	91.52 91.52 91.52 91.52 91.52	181.98 181.98 181.98 181.98	7,764.08 7,761.43 7,758.7 7,756.12 7,753.47	3,380,70 -3,480,60 -3,580.51 -3,680.41 -3,780.32	-116.96 -120.42 -123.88 -127.33 -130.79	3,382.72 3,482.69 3,582.65 3,682.62 3,782.58	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
11,500.00 11,600.00 TD at 116 8	91.52 91.52 31.52 - PBHL	181.98 181.98 ARDINGER 3	7,750.81 7,748.16 3-4-2WH	-3,880.22 -3,980.13	-134.25 -137.70	3,882.55 3,982.51	0.00 0.00	0.00 0.00	0.00 0.00
11,681.52	91.52	181.98	7,746.00	-4,061.57	-140.52	4,064.00	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL HARDINGER 3		0.00	7,746.00	-4,061.57	-140.52	7,229,564.02	2,032,320.07	40° 9′ 30.930 N	110° 5' 51.840 W

Casing Points						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
	2,500.00 8,150.96	2,500.00 7,839.65		9-5/8 7	12-1/4 8-3/4	

Plan Annotations				
Measured		Local Cool	rdinates	
Depth	Depth	+N/-S	+E/-W	Comment
(ft)	(ft)	(ft)	(ft)	
7,318.96	7,839.65	0.00	0.00	Start Build 11.00
8,150.96		-534.37	-18.49	Start 3530.55 hold at 8150.96 MD
11,681.52		-4,061.57	-140.52	TD at 11681.52

AFFIDAVIT OF EASEMENT, RIGHT-OF-WAY AND SURFACE USE AGREEMENT

Roxann Eveland personally appeared before me, being duly sworn, deposes and with respect to State of Utah R649-3-34.7 says:

- 1. My name is Roxann Eveland. I am a Landman for Newfield Production Company, whose address is 1001 17th Street, Suite 2000, Denver, CO 80202 ("Newfield").
- 2. Newfield is the Operator of the proposed Hardinger 3-3-4-2WH well to be located in the NENW of Section 3, Township 4 South, Range 2 West, Duchesne County, Utah (the "Drillsite Location"). The surface owner of the Intillsite Location is H. Bert Jenson and Diana Jenson, whose address is RR 3 Box 3621, Myton, UT 84052 ("Surface Owner").
- 3. Newfield and the Surface Owner have agreed upon an Easement, Right-of-Way and Surface Use Agreement dated January 20, 2012 covering the Drillsite Location and access to the Drillsite Location.

FURTHER AFFIANT SAYETH NO

Popann Eveland

ACKNOWLEDGEMENT

STATE OF COLORADO §

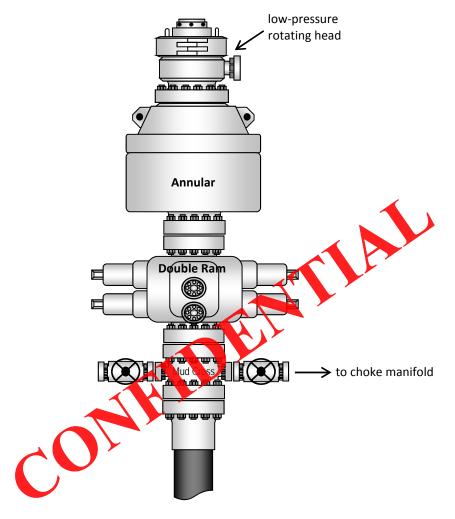
COUNTY OF DENVER §

Before me, a Notary Public, in and for the State, on this 19th day of March, 2012, personally appeared Roxann Eveland, to me known to be the identical person who executed the foregoing instrument, and acknowledged to me that she executed the same as her own free and voluntary act and deed for the uses and purposes therein set forth.

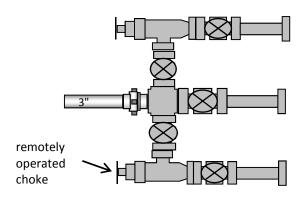
NOTARY PUBLIC

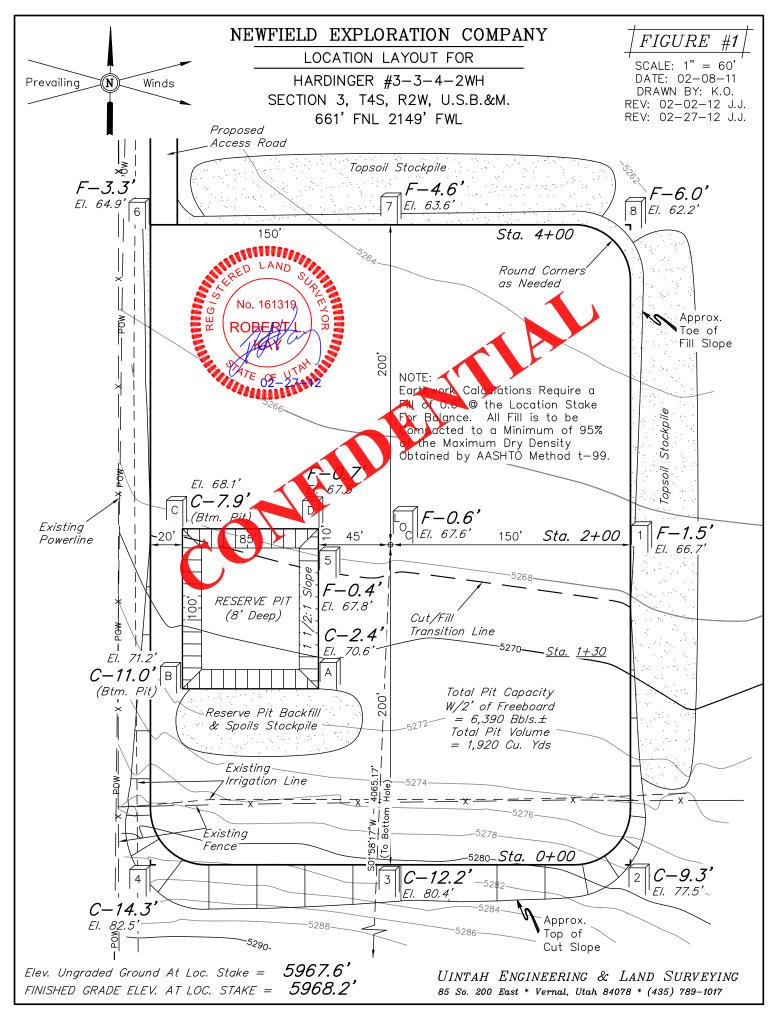
My Commission Expires:

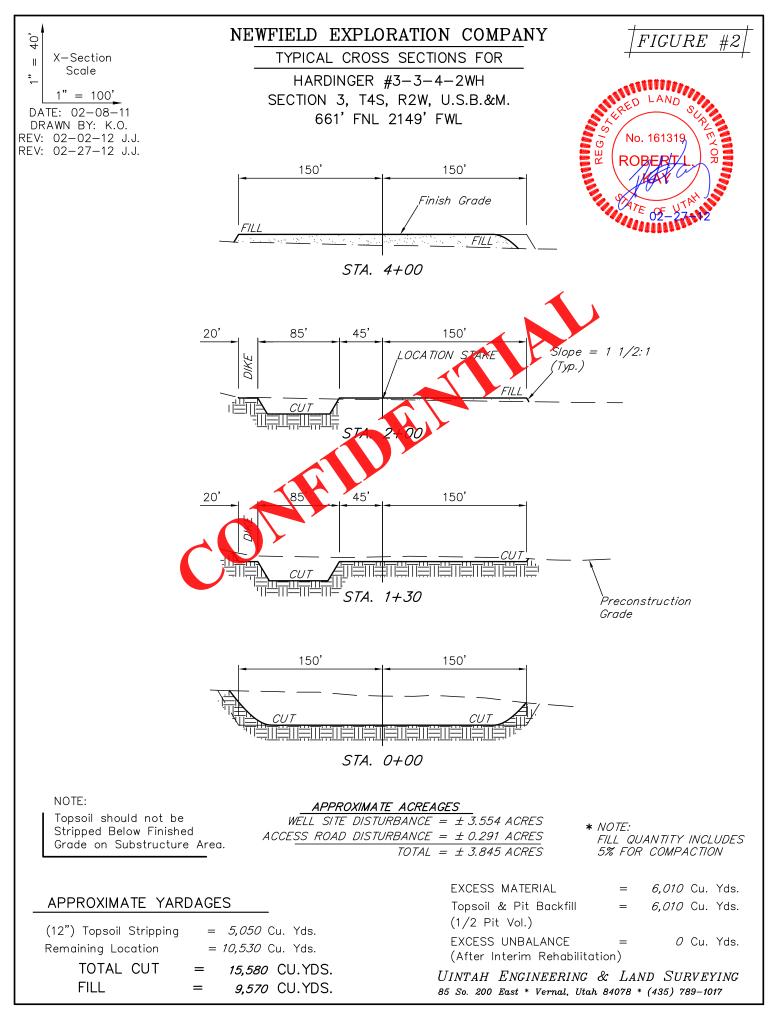
Typical 5M BOP stack configuration

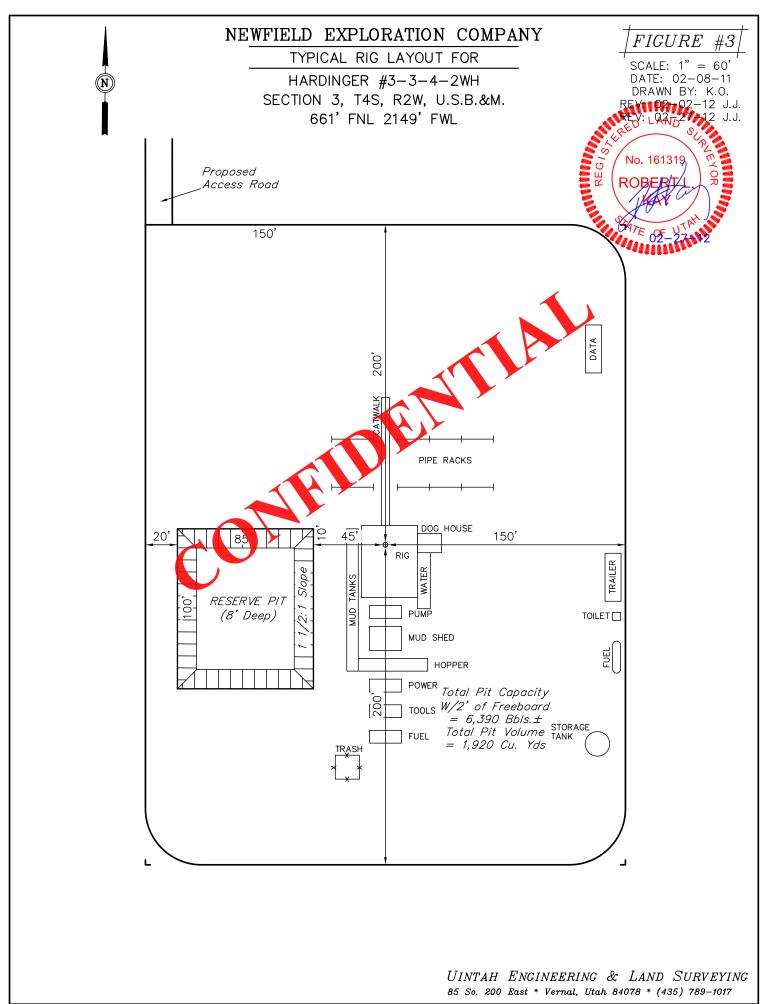


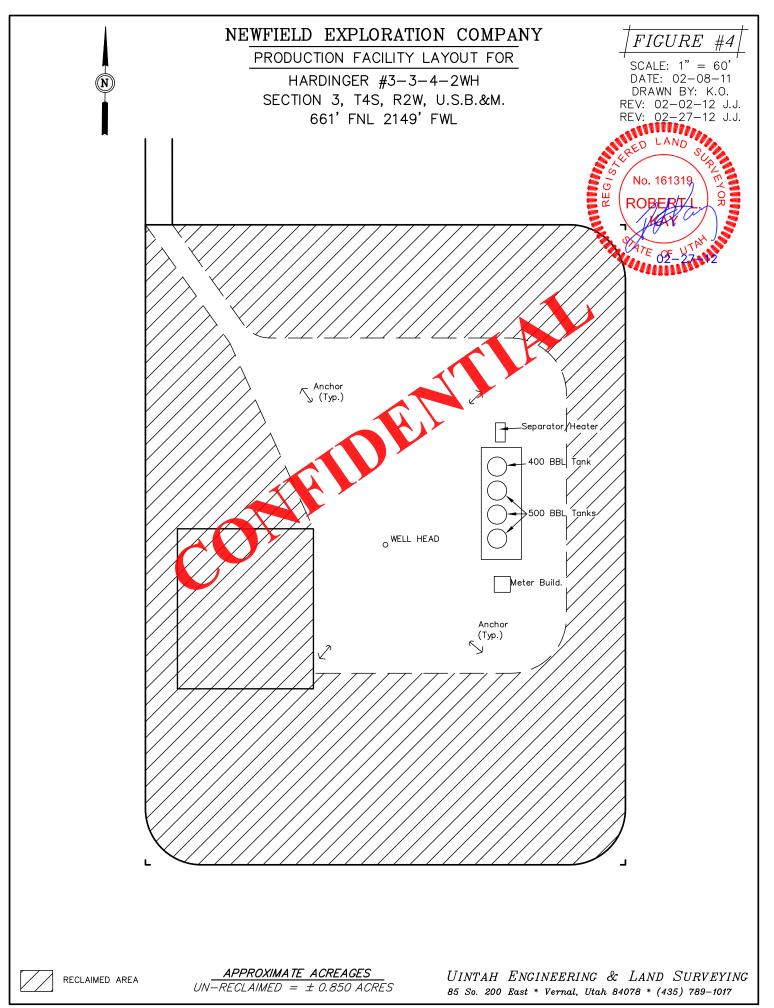
Typical 5M choke manifold configuration

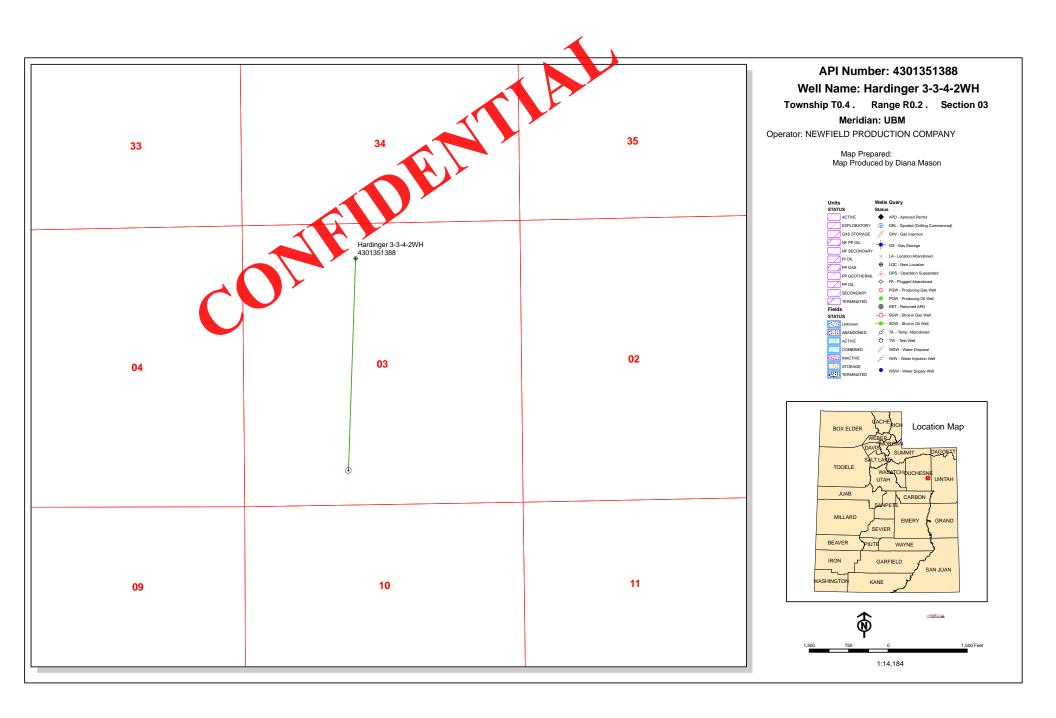












*Max Pressure Allowed @ Previous Casing Shoe=

BOPE REVIEW NEWFIELD PRODUCTION COMPANY Hardinger 3-3-4-2WH 43013513880000

							_	
Well Name		NEWFIELD PRO	DUCTION COMPA	ANY Hardinger	3-3-4	-2WH 43013	51:	
String		COND	SURF	11] [PROD		
Casing Size(")		14.000	9.625	7.000] [4.500		
Setting Depth (TVD)		60	2500	8151		11681	<u> </u>	
Previous Shoe Setting Dept	h (TVD)	0	60	2500		8151	<u> </u>	
Max Mud Weight (ppg)		8.3	8.3	11.5	Ī	11.5]	
BOPE Proposed (psi)		0	500	5000	j [5000		
Casing Internal Yield (psi)		1000	3520	9950] [12410		
Operators Max Anticipated	ators Max Anticipated Pressure (psi) 4432							
Calculations		COND Str	ring		Т	14.000	"	
Max BHP (psi)		.0	052*Setting D	epth*MW=	26	6		
					Ė		BOPE Ade	equate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		Max BH	P-(0.12*Setti	ng Depth)=	19	9	NO	
MASP (Gas/Mud) (psi)		Max BH	P-(0.22*Setti	ng Depth)=	13	3	NO	
							*Can Full	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth)					3	NO	
Required Casing/BOPE Tes	st Pressure=				60		psi	
*Max Pressure Allowed @	Previous Casing	Shoe=			0		psi *As	sumes 1psi/ft frac gradient
Calculations		SURF Str	ring		7	9.625	"	
Max BHP (psi)		.0	52*Setting D	epth MW	T			
							BOPE Add	equate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		Max BH	P (0.12*Setti	ng Depth)=	77	79	NO	air/fresh water/diverter
MASP (Gas/Mud) (psi)		Маж ВН	P-(0,23*SeLii	ng Depth)=	52	29	NO	Reasonable depth, no expected pressures
					Ė		*Can Full	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22 (S	Setting Depth	- Previous Sh	oe Depth)=	54	12	NO	
Required Casing/BOPE Tes	st Pressure				24	164	psi	
*Max Pressure Allowed @	Previous Casing	Shoe=			60)	psi *As	sumes 1psi/ft frac gradient
Calculations		I1 Strin	ıg		Т	7.000	"	
Max BHP (psi)		.0	052*Setting D	epth*MW=	48	374		
					Ė		BOPE Add	equate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		Max BH	P-(0.12*Setti	ng Depth)=	38	396	YES	
MASP (Gas/Mud) (psi)		Max BH	P-(0.22*Setti	ng Depth)=	30	081	YES	OK
							*Can Full	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(S	Setting Depth	- Previous Sh	oe Depth)=	36	331	NO	OK
Required Casing/BOPE Tes	st Pressure=				50	000	psi	
*Max Pressure Allowed @	Previous Casing	Shoe=			25	500	psi *As	sumes 1psi/ft frac gradient
Calculations		PROD Str	ring		Т	4.500	"	
Max BHP (psi)		.0	052*Setting D	epth*MW=	69	985		
							BOPE Ade	equate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		Max BH	P-(0.12*Setti	ng Depth)=	55	583	NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth				44	115	YES	OK
							*Can Full	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(S	Setting Depth	- Previous Sh	oe Depth)=	62	208	YES	
equired Casing/BOPE Test Pressure=						000	psi	

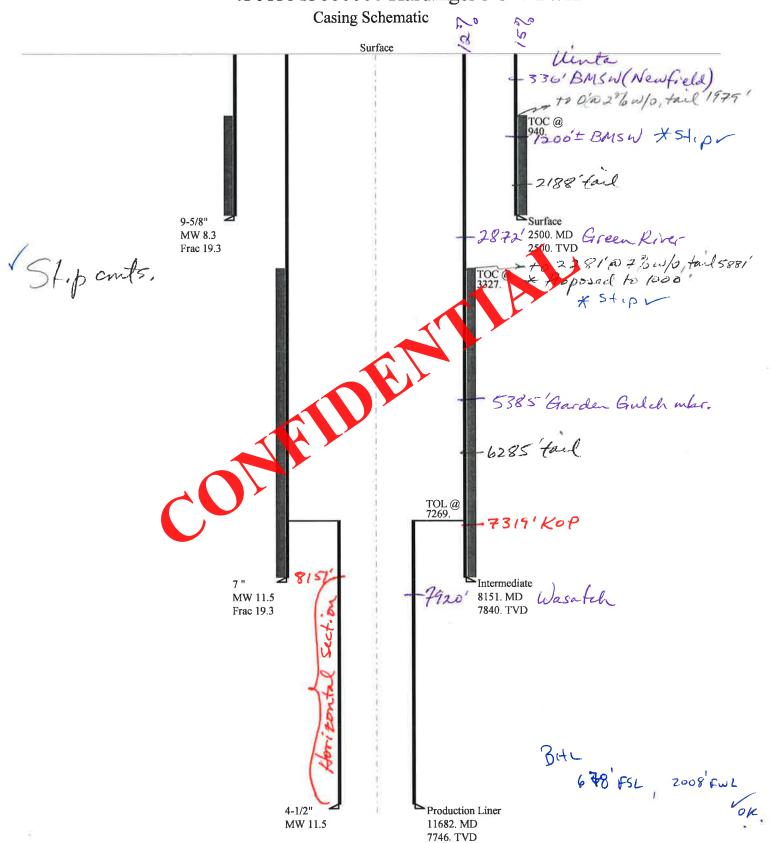
5000

8151

psi

*Assumes 1psi/ft frac gradient

43013513880000 Hardinger 3-3-4-2WH



Well name:

43013513880000 Hardinger 3-3-4-2WH

Operator:

NEWFIELD PRODUCTION COMPANY

String type:

Surface

Project ID:

43-013-51388

Fracture depth:

Injection pressure:

2,500 ft

2,500 psi

Location:

DUCHESNE COUNTY

Design parameters: Collapse		Minimum design fa	actors:	Environment: H2S considered?	No
Mud weight: Design is based on evacu	8.330 ppg ated pipe.	Design factor	1.125	Surface temperature: Bottom hole temperature: Temperature gradient: Minimum section length:	74 °F 109 °F 1.40 °F/100ft 100 ft
		Burst:		_	
		Design factor	1.00	Cement top:	940 ft
Burst		_			
Max anticipated surface				4	
pressure:	2,200 psi				
Internal gradient:	0.120 psi/ft	Tension:		Non-directional string.	
Calculated BHP	2,500 psi	8 Round STC:	1.80 (J)		
		8 Round LTC:	1.70 (J)		
No backup mud specified.		Buttress:	1.60		
		Premium:	150 (J		
		Body yield:	1.50 (B)	Re subsequent strings:	
				Next setting depth:	7,840 ft
			ir weight.	Next mud weight:	11.500 ppg
		Neutral point	2,192 ft	Next setting BHP:	4,683 psi
				Fracture mud wt:	19.250 ppg

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (los/fl)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1 Run	2500 Collapse	9.625	36.00 Collapse	J-55 Burst	ST&C Burst	2500 Burst	2500 Tension	8.796 Tension	21728 Tension
Seq 1	Load (psi) 1082	Strength (psi) 2020	Design Factor 1.867	Load (ps i) 2500	Strength (psi) 3520	Design Factor 1.41	Load (kips) 90	Strength (kips) 394	Design Factor 4.38 J

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Mining by:

Phone: 801 538-5357 FAX: 801-359-3940

Date: June 27,2012 Salt Lake City, Utah

Collapse is based on a vertical depth of 2500 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

43013513880000 Hardinger 3-3-4-2WH Well name:

NEWFIELD PRODUCTION COMPANY Operator:

Intermediate String type:

Project ID: 43-013-51388

DUCHESNE COUNTY Location:

Design parameters:	Minimum design factors:	Environment:
--------------------	-------------------------	--------------

Collapse Mud weight: 11.500 ppg

Design is based on evacuated pipe.

Collapse: Design factor

1.125

H2S considered? Surface temperature:

No 74 °F 184 °F Bottom hole temperature:

Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,000 ft

Burst:

Design factor

Tension:

Buttress:

8 Round STC:

8 Round LTC:

1.00

1.80 (J)

1.80 (4)

80 (B)

.60 150 (J Cement top:

3,327 ft

Burst

Max anticipated surface

No backup mud specified.

pressure: Internal gradient: Calculated BHP

2,959 psi 0.220 psi/ft

4,683 psi

Premium: Body yield:

> Tension is base on air weight. Neutral pol 6,480 ft

well information: tiona

Kick-off point 7319 ft Departure at shoe: 535 ft

11 °/100ft Maximum dogleg: 91.52° Inclination at shoe:

Re subsequent strings:

Next setting depth: 7,746 ft Next mud weight: 11.500 ppg Next setting BHP: 4,627 psi Fracture mud wt: 19.250 ppg Fracture depth: 7,840 ft Injection pressure: 7,840 psi

Segment True Vert Measured Drift Run Non End Est. Seq Length Size eight Grade **Finish** Depth Depth Diameter Cost (ft) s/fil (ft) (ft) (in) (in) (\$) 8151 26.00 P-110 **Buttress** 7840 8151 6.151 90647 1 Run Collapse Coll Collapse Burst Burst Burst **Tension Tension Tension** 150 Seq Load Strength Design Load Strength Design Load Strength Design **Factor Factor** (kips) (psi) (psi) (psi) (psi) (kips) **Factor** 4683 1 4683 5915 1.263 9950 2.12 203.8 830.4 4.07 B

Prepared

by:

Helen Sadik-Macdonald

Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: June 27,2012 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 7840 ft, a mud weight of 11.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Well name:

43013513880000 Hardinger 3-3-4-2WH

Operator:

NEWFIELD PRODUCTION COMPANY

String type:

Production Liner

Project ID:

43-013-51388

Location:

DUCHESNE COUNTY

Design parameters:

Minimum design factors:

Environment:

Collapse

Mud weight: 11.500 ppg Collapse: Design factor H2S considered?

No 74 °F

Design is based on evacuated pipe.

1.125

Surface temperature: 182 °F Bottom hole temperature: 1.40 °F/100ft

Temperature gradient:

Minimum section length: 1,000 ft

Burst:

Design factor

1.00

.60

150 (J

👀 (B)

Burst

Max anticipated surface

No backup mud specified.

pressure: Internal gradient: Calculated BHP

2,923 psi 0.220 psi/ft

4,627 psi

Premium:

Tension: 1.80 (J) 8 Round STC:

8 Round LTC: 1.80 (4) Buttress:

Body yield:

7,269 ft Liner top well information: Directiona Kick-off point 7319 ft

Departure at shoe: Maximum dogleg:

Inclination at shoe:

4064 ft 11 °/100ft 91.52°

Tension is base air veight. 7.705 ft Neutral por

Run Seq	Segment Length	Size	Nominal Weight	Grade	End Finish	True Vert Depth	Measured Depth	Drift Diameter	Est. Cost
1	(ft) 4382	(in) 4.5	(iles/ft) 13.50	P-110	Buttress	(ft) 7746	(ft) 11682	(in) 3.795	(\$) 26289
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load (psi)	Strength (psi)	Design Factor	Load (psi)	Strength (psi)	Design Factor	Load (kips)	Strength (kips)	Design Factor
1	4627	10680	2.308	4648	12410	2.67	6	421.9	70.08 B

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Mining by:

Phone: 801 538-5357 FAX: 801-359-3940

Date: June 27,2012 Salt Lake City, Utah

Remarks:

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 7746 ft, a mud weight of 11.5 ppg. The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator NEWFIELD PRODUCTION COMPANY

Well Name Hardinger 3-3-4-2WH

API Number 43013513880000 APD No 5700 Field/Unit WILDCAT

Location: 1/4,1/4 NENW Sec 3 Tw 4.0S Rng 2.0W 661 FNL 2149 FWL

GPS Coord (UTM)

Surface Owner H. Bert Jenson and Diana Jenson

Participants

F. Bird, C. Miller, - Newfield; C. Jensen, - DOGM

Regional/Local Setting & Topography

This location is on productive farm ground on the first level of terracing on the South Myton Bench just below the Pleasant valley canal. The property bounds 9000 S street and is East just off the Sand Wash Road in Pleasant Valley. Nearly all of the surrounding acreage is in use as farmland. The Patch restaurant is found immediately North and below. The location is flat but slopes slightly North. The South end of the bad is immediately adjacent the terrace and a small portion of the trerrace will be removed. The pad is placed alongside the Western property boundary putting the disturbance in a corner and intrinizing losses to productive farm land. The pipeline, highway 40, Gray Mountain and Pleasant Valley canals can all be found within a one mile radius.

Surface Use Plan

Current Surface Use

Agricultural

New Road

Miles

Width 300 Length 400

Src Const Material

Surface Formation

Offsite

UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Y

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

plowed farm ground. Previously planted in Corn

disturbed soils do not provide habiatat for wildlife

Soil Type and Characteristics

sandy loams

Erosion Issues Y

slopes on the south will be disturbed

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required? N

Berm Required? Y

Prime farm land

Erosion Sedimentation Control Required? Y

BMP to be implimented for control

Paleo Survey Run? N Paleo Potental Observed? N Cultural Survey Run? N Cultural Resources? N

Reserve Pit

Site-Specific Factors	Site R	anking	
Distance to Groundwater (feet)	100 to 200	5	
Distance to Surface Water (feet)		20	
Dist. Nearest Municipal Well (ft)		20	
Distance to Other Wells (feet)	>1320	0	
Native Soil Type	Mod permeabilit	y 10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (in the	10 to 20	5	
Affected Populations			
Presence Nearby Utility Conduits	Present	15	
	Final Score	80	1 Sensitivity Level

Characteristics Requirements

Pit to be dug to a depth of 8'. Pit should be fenced to prevent entry by deer, other wildlife and domestic animals. Pit to be closed within one year after drilling activities are complete. Pit to be placed on the West side nearest the boundary fenceline

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 16 Pit Underlayment Required? N

Other Observations / Comments

Chris Jensen 5/2/2012
Evaluator Date / Time

Application for Permit to Drill Statement of Basis

Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
5700	43013513880000	LOCKED	OW	P	No
Operator	NEWFIELD PRODUCTION (COMPANY	Surface Owner-APD	H. Bert Jenson Diana Jenson	and
Well Name	Hardinger 3-3-4-2WH		Unit		
Field	WILDCAT		Type of Work	DRILL	
Location	NENW 3 4S 2W U (UTM) 576877E 44469		2149 FWL GPS Coo	d	

Geologic Statement of Basis

Newfield proposes to set 60' of conductor and 2,500' of surface casing at this location. The surface hole will be drilled with air and fresh water must. The base of the moderately saline water at this location is estimated to be at a depth of 1,200°. A search of Division of Water Rights records shows 6 water wells within a 10,000 foot radius of the center of Section 3. Depth is listed as ranging from 28 to 108 feet. Depth is not listed for 3 wells. One well with a depth of 90 feet is approximately 1/2 must from the proposed location all other wells are over a mile away. Water use is listed as irrigation, stock watering and domestic use. The surface formation at this site is the Unita Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a large volume source of useable ground water. The proposed surface casing should adequately protect useable ground water in this area.

Brad Hill 5/21/2012
ARD Evaluator Date / Time

Surface Statement of Basis

Operator has a surface agreement in place with the landowner. I was made aware that some concessions were made to the landowner. Location is proposed in the best possible position in the corner of the property boundaries. Access road is going to be placed along the Western most boundary of the parcel as well as tank battery.

The soil type and topography at present do not combine to pose a significant threat to erosion or sediment/ pollution transport in these regional climate conditions with the exception of the disturbance to the slope on the south end. Construction standards of the Operator appear to be adequate for the proposed purpose. I recognize no special flora or animal species or cultural resources on site that the proposed action may harm. The landowner was invited but was not in attendance for the pre-site inspection. The location should be bermed to prevent spills from leaving the confines of the pad protecting the prime farmland from contamination. Fencing around the reserve pit will be necessary once the well is drilled to prevent wildlife and livestock from entering. A synthetic liner of 16 mils (minimum) should be utilized in the reserve pit. Measures (BMP's) shall be taken to protect steep slopes from erosion, sedimentation and stability issues from corners 4 to 6 on the southern side of pad.

Chris Jensen
Onsite Evaluator

5/2/2012 **Date / Time**

Conditions of Approval / Application for Permit to Drill

Category Condition

Drilling Location needs to be turned 180 degrees. To put tank battery and pit on the west side next to the

fenceline

Pits A synthetic liner with a minimum thickness of 16 mils shall be properly installed and maintained in

the reserve pit.

Pits The reserve pit should be located on the west side of the location.

Surface The well site shall be bermed to prevent fluids from leaving the pad.

Surface The reserve pit shall be fenced upon completion of drilling operations.

Surface Measures (BMP's) shall be taken to protect steep slopes from erosion, sedimentation and stability

issues from corners 4 to 6 on the southern side of pad



WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 4/23/2012 API NO. ASSIGNED: 43013513880000 WELL NAME: Hardinger 3-3-4-2WH **OPERATOR:** NEWFIELD PRODUCTION COMPANY (N2695) PHONE NUMBER: 435 719-2018 **CONTACT:** Don Hamilton PROPOSED LOCATION: NENW 03 040S 020W Permit Tech Review: SURFACE: 0661 FNL 2149 FWL Engineering Review: BOTTOM: 0660 FSL 1980 FWL Geolo Review: **COUNTY: DUCHESNE LATITUDE: 40.16948 LONGITUDE:** -110.09715 **UTM SURF EASTINGS: 576877.00** NORTHINGS: 4446958.00 FIELD NAME: WILDCAT LEASE TYPE: 4 - Fee LEASE NUMBER: patented G FORMATION(S): GREEN RIVER PROPOSED PR **DUGI** SURFACE OWNER: 4 - Fee **COALBED METHANE: NO RECEIVED AND/OR REVIEWED:** LOCATION AND SITING: ✓ PLAT R649-2-3. Bond: STATE - B001834 Unit: R649-3-2. General **Potash** Oil Shale 190-5 Oil Shale 190-3 R649-3-3. Exception Oil Shale 190-13 **Drilling Unit** Board Cause No: R649-3-2.6 Water Permit: 437478 RDCC Review: 2012-07-27 00:00:00.0 **Effective Date: Fee Surface Agreement** Siting: Intent to Commingle R649-3-11. Directional Drill **Commingling Approved**

s: Presite Completed TEMP 640 ACRE SPACING: Comments:

Stipulations: 5 - Statement of Basis - bhill

12 - Cement Volume (3) - hmacdonald

21 - RDCC - dmason

23 - Spacing - dmason 25 - Surface Casing - hmacdonald 26 - Temporary Spacing - bhill 27 - Other - bhill



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Hardinger 3-3-4-2WH

API Well Number: 43013513880000

Lease Number: patented

Surface Owner: FEE (PRIVATE)

Approval Date: 8/2/2012

Issued to:

NEWFIELD PRODUCTION COMPANY, Rt 3 Box 3630, Myton, UT 84052

Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-2.6. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

The Application for Permit to Drill has been forwarded to the Resource Development Coordinating Committee for review of this action. The operator will be required to comply with any applicable recommendations resulting from this review. (See attached)

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Cement volume for the 7" intermediate string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 1000' MD as indicated in the submitted drilling plan.

Surface casing shall be cemented to the surface.

A temporary 640 acre spacing unit is hereby established in Section 3, Township 4 S, Range 2 W, USBM for the drilling of this well (R649-3-2.6). No other horizontal wells may be drilled in this section unless approved by the Board of Oil, Gas and Mining.

In accordance with Utah Admin. R.649-3-21, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan contact Dustin Doucet
- Significant plug back of the well contact Dustin Doucet
- Plug and abandonment of the well contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well - contact Carol Daniels OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at http://oilgas.ogm.utah.gov

- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to cementing or testing casing contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
 - contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 office
- Dustin Doucet 801-538-5281 office

801-733-0983 - after office hours

• Dan Jarvis 801-538-5338 - office

801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
 - Requests to Change Plans (Form 9) due prior to implementation
 - Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
 - Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas Sundry Number: 40046 API Well Number: 43013513880000

			FORM 9		
	STATE OF UTAH				
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MININ		5.LEASE DESIGNATION AND SERIAL NUMBER: patented		
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
	oposals to drill new wells, significantly de reenter plugged wells, or to drill horizonta n for such proposals.		7.UNIT or CA AGREEMENT NAME:		
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: HARDINGER 3-3-4-2WH		
2. NAME OF OPERATOR: NEWFIELD PRODUCTION CO	DMPANY		9. API NUMBER: 43013513880000		
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT		HONE NUMBER: Ext	9. FIELD and POOL or WILDCAT: WILDCAT		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0661 FNL 2149 FWL			COUNTY: DUCHESNE		
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 03 Township: 04.0S Range: 02.0W Meridi	an: U	STATE: UTAH		
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
	ACIDIZE	ALTER CASING	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
8/2/2013	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION		
Date of Work Completion:		1			
	│	PLUG AND ABANDON	L PLUG BACK		
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION		
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	L TEMPORARY ABANDON		
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL		
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION		
	WILDCAT WELL DETERMINATION	OTHER	OTHER:		
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show all	pertinent details including dates, o	depths, volumes, etc.		
I .	to extend the Application for F		Approved by the		
			Utah Division of		
			Oil, Gas and Mining		
			Date: July 16, 2013		
			By: Bacylll		
NAME (DI EASE DOINT)	PHONE NUMBER	TITLE			
NAME (PLEASE PRINT) Mandie Crozier	435 646-4825	Regulatory Tech			
SIGNATURE N/A		DATE 7/15/2013			

Sundry Number: 40046 API Well Number: 43013513880000



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43013513880000

API: 43013513880000

Well Name: HARDINGER 3-3-4-2WH

Location: 0661 FNL 2149 FWL QTR NENW SEC 03 TWNP 040S RNG 020W MER U

Company Permit Issued to: NEWFIELD PRODUCTION COMPANY

Date Original Permit Issued: 8/2/2012

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on pri Yes 📵 No	vate land, has the ownership changed, if so, has the surface agreement been updated? 🔵
	been drilled in the vicinity of the proposed well which would affect the spacing or siting or this location? (Yes (No
 Has there been proposed well? 	any unit or other agreements put in place that could affect the permitting or operation of this Yes No
Have there been proposed location	n any changes to the access route including ownership, or rightof- way, which could affect the on? Yes No
• Has the approve	ed source of water for drilling changed? 🔘 Yes 🌘 No
	n any physical changes to the surface location or access route which will require a change in twas discussed at the onsite evaluation? Q Yes ® No
• Is bonding still i	in place, which covers this proposed well? 🌘 Yes 💭 No
Signature: Mandie Cro	ozier Date: 7/15/2013

Title: Regulatory Tech Representing: NEWFIELD PRODUCTION COMPANY

Sundry Number: 53249 API Well Number: 43013513880000

			FORM 9		
	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES	3			
	DIVISION OF OIL, GAS, AND MININ		5.LEASE DESIGNATION AND SERIAL NUMBER: patented		
SUNDF	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
	oposals to drill new wells, significantly de reenter plugged wells, or to drill horizont n for such proposals.		7.UNIT or CA AGREEMENT NAME:		
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: HARDINGER 3-3-4-2WH				
2. NAME OF OPERATOR: NEWFIELD PRODUCTION CO	OMPANY		9. API NUMBER: 43013513880000		
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT		HONE NUMBER: Ext	9. FIELD and POOL or WILDCAT: WILDCAT		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0661 FNL 2149 FWL			COUNTY: DUCHESNE		
QTR/QTR, SECTION, TOWNS	HIP, RANGE, MERIDIAN: 03 Township: 04.0S Range: 02.0W Meridi	an: U	STATE: UTAH		
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
	ACIDIZE	ALTER CASING	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
8/2/2014	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	New construction		
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
		1			
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION		
Date or Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	LI TEMPORARY ABANDON		
	L TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL		
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION		
	WILDCAT WELL DETERMINATION	OTHER	OTHER:		
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show all	pertinent details including dates, o	depths, volumes, etc.		
Newfield proposes	to extend the Application for F	Permit to Drill this well.			
			Utally D4yi20114of Oil, Gas and Mining		
			Date:		
			J. 102 cul DO		
			By:		
NAME (PLEASE PRINT) Mandie Crozier	PHONE NUMBER 435 646-4825	R TITLE Regulatory Tech			
SIGNATURE N/A		DATE 7/10/2014			

Sundry Number: 53249 API Well Number: 43013513880000



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43013513880000

API: 43013513880000 Well Name: HARDINGER 3-3-4-2WH

Location: 0661 FNL 2149 FWL QTR NENW SEC 03 TWNP 040S RNG 020W MER U

Company Permit Issued to: NEWFIELD PRODUCTION COMPANY

Date Original Permit Issued: 8/2/2012

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
• Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
• Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
• Has the approved source of water for drilling changed? Yes No
 Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? Yes No
nature: Mandie Crozier Date: 7/10/2014

Signature: Mandie Crozier **Date:** 7/10/2014

Title: Regulatory Tech Representing: NEWFIELD PRODUCTION COMPANY



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

August 6, 2015

Newfield Production Company Rt 3 Box 3630 Myton, UT 84052

Re: APDs Rescinded for Newfield Production Company, Duchesne County

Ladies and Gentlemen:

Enclosed find the list of APDs that is being rescinded. No drilling activity at these locations has been reported to the division. Therefore, approval to drill these wells is hereby rescinded effective August 6, 2015.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

Environmental Scientist

lasor L

cc: Well File

Brad Hill, Technical Service Manager

SITLA, Ed Bonner



43-013-50789 GMBU S-32-8-16 (STATE) 43-013-51373 Haueter 14-7-3-1W 43-013-51388 Hardinger 3-3-4-2WH